IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

YONG-JIN PARK

Serial No.:

to be assigned

Examiner:

to be assigned

Filed:

30 January 2004

Art Unit:

to be assigned

For:

APPARATUS AND METHOD FOR TESTING AN xDSL TRANSCEIVER

UNIT-CENTRAL OFFICE

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application

Commissioner for Patents P.O.Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites, describes and provides copies of the following art references:

- U.S. Patent No. 6,646,994 to Hendrichs et al., entitled SYSTEM AND METHOD
 FOR CONTROLLING DISTORTION IN THE POTS BAND IN A DUAL POTS AND
 DISCRETE MULTI-TONE COMMUNICATION SYSTEM, issued on November 11,
 2003;
- U.S. Patent No. 6,621,831 to Linz, entitled METHOD AND APPARATUS FOR VERIFYING AND CORRECTING CONNECTIVITY, issued on September 16, 2003;
- 3. U.S. Patent No. 6,580,752 to Amrany et al., entitled ALTERNATIVE CONFIGURATIONS FOR AN ADSL SYSTEM OPERATING IN A TIME DUPLEX NOISE ENVIRONMENT, issued on June 17, 2003;
- 4. U.S. Patent No. 6,580,727 to Yim et al., entitled ELEMENT MANAGEMENT

- SYSTEM FOR A DIGITAL SUBSCRIBER LINE ACCESS MULTIPLEXER, issued on June 17, 2003;
- 5. U.S. Patent No. 6,574,308 to Macdonald *et al.*, entitled *DIGITAL SUBSCRIBER LINE DIAGNOSTIC SYSTEM*, issued on June 3, 2003;
- 6. U.S. Patent No. 6,539,081 to Zakrzewski et al., entitled METHOD OF ESTABLISHING SIGNALING RATE FOR SINGLE-LINE DIGITAL SUBSCRIBER LINK PROVIDING EXTENDED RANGE ADSL SERVICE WITH AUXILIARY POTS CHANNEL, issued on March 25, 2003;
- 7. U.S. Patent No. 6,532,277 to Ulanskas *et al.*, entitled *METHOD FOR CONTROLLING DSL TRANSMISSION POWER*, issued on March 11, 2003;
- 8. U.S. Patent No. 6,532,216 to Tennyson, entitled *CENTRAL OFFICE BASED ADSL*. *TEST PLATFORM*, issued on March 11, 2003;
- 9. U.S. Patent No. 6,520,744 to Verbin et al., entitled METHOD AND APPARATUS

 FOR IMPROVING PERFORMANCE OF A SPLITTERLESS ASYMMETRIC

 DIGITAL SUBSCRIBER LINE (ADSL), issued on February 18, 2003;
- 10. U.S. Patent No. 6,516,053 to Ryan et al., entitled SYSTEM AND METHOD FOR TESTING TELECOMMUNICATION SERVICE INSTALLATIONS, issued on February 4, 2003;
- 11. U.S. Patent No. 6,496,566 to Posthuma, entitled *METALLIC TESTING OF A SUBSCRIBER LOOP THAT PROVIDES BOTH VOICE AND DIGITAL SUBSCRIBER LINE SERVICES*, issued on December 17, 2002;
- 12. U.S. Patent No. 6,477,595 to Cohen *et al.*, entitled *SCALABLE DSL ACCESS MULTIPLEXER WITH HIGH RELIABILITY*, issued on November 5, 2002;
- 13. U.S. Patent No. 6,404,861 to Cohen *et al*, entitled *DSL MODEM WITH MANAGEMENT CAPABILITY*, issued on June 11, 2002;
- 14. U.S. Patent No. 6,363,079 to Barzegar et al., entitled MULTIFUNCTION INTERFACE FACILITY CONNECTING WIDEBAND MULTIPLE ACCESS SUBSCRIBER LOOPS WITH VARIOUS NETWORKS, issued on March 26, 2002;

- 15. U.S. Patent No. 6,310,909 to Jones, entitled *DSL RATE ADAPTATION*, issued on October 30, 2001;
- 16. U.S. Patent No. 6,292,559 to Gaikwad et al., entitled SPECTRAL OPTIMIZATION AND JOINT SIGNALING TECHNIQUES WITH UPSTREAM/DOWNSTREAM SEPARATION FOR COMMUNICATION IN THE PRESENCE OF CROSSTALK, issued on September 18, 2001;
- 17. U.S. Patent No. 6,208,637 to Eames, entitled *METHOD AND APPARATUS FOR*THE GENERATION OF ANALOG TELEPHONE SIGNALS IN DIGITAL

 SUBSCRIBER LINE ACCESS SYSTEMS, issued on March 27, 2001;
- 18. U.S. Patent No. 6,192,109 to Amrany *et al.*, entitled *APPARATUS AND METHOD*FOR IMPROVED DSL COMMUNICATION, issued on February 20, 2001;
- U.S. Patent No. 5,889,470 to Kaycee et al., entitled DIGITAL SUBSCRIBER LINE.
 ACCESS DEVICE MANAGEMENT INFORMATION BASE, issued on March 30, 1999;
- 20. U.S. Patent No. 5,883,883 to Baker et al., entitled APPARATUS AND METHOD

 FOR TESTING THE ADMINISTRATION OF NETWORK BASED

 SUPPLEMENTARY SERVICES, issued on March 16, 1999;
- 21. U.S. Patent No. 5,784,558 to Emerson *et al.*, entitled *METHOD AND APPARATUS*FOR TESTING OF EXTENDED ISDN BRI SERVICE, issued on July 21, 1998;
- 22. U.S. Patent No. 5,111,497 to Bliven *et al.*, entitled *ALARM AND TEST SYSTEM*FOR A DIGITAL ADDED MAIN LINE, issued on May 5, 1992; and
- 23. U.S. Patent No. 5,005,197 to Parsons et al., entitled METHOD AND APPARATUS AS FOR TESTING A TELEPHONE LINE INTERFACE CARD, issued on April 2, 1991.

Hendrichs *et al.* '994 relates to a system and method for minimizing signal distortion in a discrete multi-tone communications system that is being used in both the POTS and the DSL frequency bands.

Linz '831 discloses a method and apparatus for providing an enable signal to a configuration device for generating a preselected signal, providing the preselected signal to a peer station over a subscriber line, and adjusting a transmission path of a signal to the peer station through the subscriber line in response to the preselected signal.

Amrany et al. '752 discloses an ADSL system for operating in a time duplex system that provides alternative configurations for limiting crosstalk in a broadband network.

Yim *et al.* '727 discloses an access multiplexer for a digital subscriber line communications network which has element management system capability.

Macdonald *et al.* '308 discloses a communication device which transmits very low frequency signals in order to help diagnose the cause of a communication problem in a DSL communication system.

Zakrzewski *et al.* '081 discloses a method of establishing signaling rate for a single-line digital subscriber link providing extended range ADSL service with auxiliary POTS channel.

Ulanskas *et al.* '277 discloses a method for controlling transmission power from a customer premise equipment device over a local loop of a digital subscriber line which involves determining a maximum power level for transmissions over the local loop.

Tennyson '216 discloses an apparatus for testing the installation of asymmetric digital subscriber lines (ADSL) that includes an ADSL transceiver unit-central office (ATU-C), an ADSL transceiver unit-remote (ATU-R) and a load coil detector.

Verbin et al. '744 discloses a method for communicating at least one of the hook state and associated in line filter indication from the ADSL transceiver unit-remote side to the ADSL

transceiver unit-central office, or vice versa, for improving the performance of a splitterless ADSL system.

Ryan et al. '053 discloses a modular telecommunication test system which includes a portable computer system and at least one portable telecommunication test module located external to the computer system.

Posthuma '566 discloses metallic testing of a subscriber loop that provides voice and DSL services, the testing being provided by a voice switch and DSL services, each of which includes a metallic test unit.

Cohen *et al.* '595 discloses a digital subscriber line (DSL) multiplexer used in conjunction with a DSL modem to provide a reliable high speed connection for an end-user.

Cohen et al. '861 discloses a modem using a digital subscriber line (DSL), which provides high speed access over a copper plant.

Barzegar et al '079 discloses a multifunction interface facility which connects wideband multiple access subscriber loops with various networks.

Junes '909 discloses a method for enhancing the bit rate and/or margin at which quadrature amplitude modulation (QAM) communication is performed.

Gaikwad *et al.* '559 discloses a system and method for determining transmission characteristics for a communications channel and for transmitting data on the communications channel.

Eames '637 discloses a method and apparatus for providing analog telephony services over

a digital subscriber loop access system.

Amrany et al. '109 relates to an xDSL modem that is capable of transmitting at multiple data rates.

Kaycee *et al.* '470 relates to a digital subscriber line (DSL) access device management information base (MIB) which allows the remote management of a DSL access device by using a constructed enterprise DSL MIB to define a plurality of objects that describe the operation of a DSL access device.

Baker *et al.* '883 relates to an apparatus and method for testing the administration of network based supplementary services.

Emerson *et al.* '558 discloses an enhanced ISDN-DP transmission device which allows for testing of ISDN-protocol communication paths using an existing DDS-protocol test infrastructure.

Blilven *et al.* '497 discloses a test system directed to apparatus for transmitting and receiving multiple telephone transmission signals over a single twisted pair.

Parsons et al. '197 relates to a method and apparatus for testing a telephone line interface card.

The citation of the foregoing references is not intended to constitute an assertion that other or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging and thorough search of the relevant art.

No fee is incurred by this Statement.

Respectfully submitted,

Robert E. Bushnell

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Folio: P56951

Date: 30 January 2004

I.D.: REB/kf

INFORMATION DISCLOSURE STATEMENT PTO-1449 (PAGE 1 OF 2)

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SERIAL NUMBER	DOCKET NO. P56951				
APPLICANT YONG-JIN PARK					
FILING DATE 30 January 2004	GROUP				

U.S. PATENT DOCUMENTS									
EXAMINER	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE			
_	6,646,994	11/03	Hendrichs et al.						
	6,621,831	9/03	Linz						
	6,580,752	6/03	Amrany et al.						
	6,580,727	6/03	Yim et al.						
	6,574,308	6/03	Macdonald et al.						
	6,539,081	3/03	Zakrzewski et al.						
	6,532,277	3/03	Ulanskas et al.						
	6,532,216	3/03	Tennyson						
	6,520,744	2/03	Verbin et al.						
	6,516,053	2/03	Ryan et al.		· .				
	6,496,566	12/02	Posthuma	,					
	6,477,595	11/02	Cohen et al.						
FOREIGN PATENT DOCUMENTS						TRANSLATION			
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO		
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INFORMATION DISCLOSURE STATEMENT PTO-1449 (PAGE 2 OF 2)		SERIAL NUMBER DOCKET NO. P56951							
		APPLICANT YONG-JIN PARK							
				FILING DATE 30 January	FILING DATE 30 January 2004		GROUP		
			U.S. PATEN	NT DOCUMENTS					
EXAMINER	DOCUMENT NUMBER	DATE	NAME CLASS			SUBCLASS	FILING	DATE	
	6,404,861	6/02	Cohen et al.					•	
	6,363,079	3/02	Barzegar et a	I. .					
	6,310,909	10/01	Jones						
	6,292,559	9/01	Gaikwad et al						
	6,208,637	3/01	Eames						
	6,192,109	2/01	Amrany et al.						
	5,889,470	3/99	Kaycee et al.				-	•	
	5,883,883	3/99	Baker et al.						
	5,784,558	7/98	Emerson et a	l.					
	5,111,497	5/92	Bliven et al.						
	5,005,197	4/91	Parsons et al.					•	
FOREIGN PATENT DOCUMENTS					TRANSLATION				
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